Page 36, line 6, delete "element" and replace it with -- UHV compatible lead through--.

Page 36, line 12, delete "element" and replace it with -- UHV compatible lead through--.

IN THE ABSTRACT

Please delete the Abstract in its entirety, and replace it with the following:

There is provided an ultra high vacuum (UHV) compatible lead-through comprises (a) a housing, (b) a first space, within the housing, connected via a first port to a space outside the UHV-compatible lead through, (c) a second space, within the housing, connected via a second port to a closed system containing a polarized gas, (d) a movable component, separating the first space from the second space via an intermediate space, and (e) seals for limiting a penetration of volatile media from the first space into the second space. The lead through is particularly suited for use in the production of polarized gases, such as 'He.

IN THE CLAIMS

Please amend the claims as follows:

Cancel claims 1 through 52.

Add new claims 53 through 104 as follows: